Amendments to the Claims

This listing of claims will replace all previous versions, and listings, of claims in the application.

1.   (currently amended)   An interface system for monitoring a number of channels in a communications system having at least one group of a number of nodes, each node having a number of channels, the interface system comprising:

a switch for controlling a spectrum analyzer interface with the nodes;

a processor electrically coupled to a local interface;

a memory electrically coupled to the local interface;

a display device electrically coupled to the local interface; and

object-oriented warning interface logic stored on the memory and executable by the processor to control the switch and the spectrum analyzer, the warning interface logic including:

logic to enable creation of, based upon user input data, and display of a test plan and a channel plan corresponding to at least one node encompassing all expected values for each service to be operated on said node;

logic to generate on the display device a channel percent advisory indicator within a channel level interface component upon an occurrence of an advisory event in a channel associated therewith, and a group percent advisory indicator in a group level interface component associated with the at least one group upon an occurrence of an advisory event in a channel associated with the at least one group;

logic to generate on the display device a channel critical alarm indicator within a channel level interface component upon an occurrence of a critical event in a channel associated therewith, and a group critical alarm indicator in a group level interface component associated with the at least one group upon an occurrence of a critical event in a channel associated with the at least one group;

logic to conduct automatic, periodic testing of signal characteristics of the at least one node according to the channel plan and the test plan; and

logic to conduct more frequent testing of selected nodes associated with a

prior occurrence of advisory events or critical events, the more

frequent testing in a prioritized node order based upon the current and

historical number of alarm-triggering test measurements associated

with the selected nodes, and upon the percentage of test measurements

outside of an acceptable range[[d]] for the selected nodes.

2. (canceled)

3. (original) The system of claim 1, wherein the warning interface logic further

comprises logic to generate a node percent advisory indicator on the display device in a

node level interface component associated with one of the nodes upon an occurrence of

an advisory event in a channel associated with the one of the nodes.

4. (canceled)

5. (original) The system of claim 1, wherein the warning interface logic further

comprises logic to generate a node critical alarm indicator on the display device in a

node level interface component associated with one of the nodes upon an occurrence of

a critical event in a channel associated with the one of the nodes.

6-10. (canceled)

11. (currently amended) In a system including a spectrum analyzer and a local interface

to which are electrically coupled a switch for controlling the spectrum analyzer, a

processor, a memory, and a display device, the memory having stored on it object-

oriented warning interface logic executable by the processor to control the switch and

the spectrum analyzer, an interface method for monitoring a number of channels in a

communications system having at least one group of a number of nodes, each node

having a number of channels, the interface method comprising the steps of:

creating, based upon user input data, and displaying a test plan and a channel plan

corresponding to at least one node encompassing all expected values for each

service to be operated on said node;

Page 3 of 6

conducting automatic, periodic testing of signal characteristics of the at least one
node according to the channel plan and the test plan;

conducting more frequent testing of selected nodes associated with a prior
occurrence of advisory events or critical events, the more frequent testing in a
prioritized node order based upon the current and historical number of alarm-
triggering test measurements associated with the selected nodes, and upon the
percentage of test measurements outside of an acceptable range[[d]] for the
selected nodes;

generating on the display device during automated channel testing a channel
percent advisory indicator within a channel level interface component upon an
occurrence of an advisory event in a channel associated therewith, and a group
percent advisory indicator in a group level interface component associated
with the at least one group upon an occurrence of an advisory event in a
channel associated with the at least one group; and

generating on the display device during automated channel testing a channel
critical alarm indicator within a channel level interface component upon an
occurrence of a critical event in a channel associated therewith, and a group
critical alarm indicator in a group level interface component associated with
the at least one group upon an occurrence of a critical event in a channel
associated with the at least one group.

12. (canceled)

13. (original)   The method of claim 11, further comprising the step of generating a node
percent advisory indicator on the display device in a node level interface component
associated with one of the nodes upon an occurrence of an advisory event in a channel
associated with the one of the nodes.

14. (canceled)

15. (original)   The method of claim 11, further comprising the step of generating a node
critical alarm indicator on the display device in a node level interface component

associated with one of the nodes upon an occurrence of a critical event in a channel associated with the one of the nodes.

16-17. (canceled)